830-1824 CAL-TINT®II RAW SIENNA

Material no. Specification Order Number

139623

Version Revision date Print Date Page

1.10 / US 08/31/2005 9/2/2005 1 / 10

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

830-1824 CAL-TINT®II RAW SIENNA Trade name

Use of the Substance /

Preparation Company

Aqueous colorant

Degussa Corporation

379 Interpace Parkway Parsippany, NJ 07054

USA

973-541-8000 Telephone

Telefax 973-541-8040

US: CHEMTREC EMERGENCY

NUMBER

800-424-9300

CANADA: CANUTEC EMERGENCY NUMBER 613-996-6666

Product Regulatory Services

973-541-8060

2. COMPOSITION/INFORMATION ON INGREDIENTS

Information on ingredients / Hazardous components

NJTSR No.56705700001-5043P Percent (Wt./ Wt.) CAS-No. Trade Secret 1.0 - 5.0 % Diethylene glycol CAS-No. 111-46-6 Percent (Wt./ Wt.) 10 - 30 % C.I. Pigment Yellow 42 (Iron oxide) CAS-No. 51274-00-1 Percent (Wt./ Wt.) 30 - 60 % Talc, Magnesium silicate hydrate 14807-96-6 CAS-No. Percent (Wt./ Wt.) 5.0 - 10 % Distillates (petroleum), hydrotreated light; Kerosine - unspecified CAS-No. 64742-47-8 Percent (Wt./ Wt.) 0.10 - 1.0 % NJTSR No.56705700001-5765P

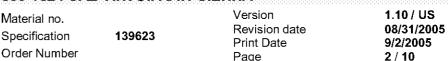
CAS-No. Trade Secret Percent (Wt./ Wt.) 1.0 - 5.0 %

NJTSR No.56705700001-5030P

Percent (Wt./ Wt.) CAS-No. Trade Secret 1.0 - 5.0 %

Other information

830-1824 CAL-TINT®II RAW SIENNA





This material is classified as hazardous under OSHA regulations.

3. HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***

Form-paste Color-light yellow - light brown Odor-Glycol odor.

CAL-TINT colorants may cause eye, skin and respiratory tract irritation. May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye contact

According to test results on similar colorant base mixtures, this CAL-TINT colorant is classified as a moderate eye irritant. May cause tearing, reddening and/or swelling.

Skin Contact

CAL-TINT colorants may cause irritation.

Inhalation

CAL-TINT colorants may cause irritation.

Ingestion

Moderately toxic. May be harmful if swallowed.

Ingestion of excessive amounts of diethylene glycol causes abdominal discomfort or pain, nausea, vomiting, dizziness, central nervous system effects, kidney damage and cardiopulmonary effects (metabolic acidosis) which may be fatal (estimated human oral lethal dose, 1.0 to 1.2 g/kg) and may cause liver effects.

Chronic Health Hazard

Prolonged inhalation of iron oxide dust is known to produce a condition known as siderosis. On X-rays it appears to be a benign pneumoconiosis and is not associated with pulmonary fibrosis or disability unless there is concurrent exposure to other fibrosis producing materials such as silica. Short term exposures to talc may cause lung irritation. Long term excessive exposure to talc dust may cause talcosis, a pulmonary fibrosis which in turn may lead to severe and permanent damage to the lungs. NTP Toxicology and Carcinogenesis Studies of Talc revealed that there is some evidence of carcinogenic activity in male rats and clear evidence of carcinogenic activity in female rats. There was no evidence of carcinogenic activity in male or female mice.

Because this product is a free-flowing liquid or paste, dust inhalation is not an expected route of exposure.

4. FIRST AID MEASURES

Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

830-1824 CAL-TINT®II RAW SIENNA

Version 1.10 / US
Revision date 08/31/2005
Print Date 9/2/2005
Page 3 / 10



Skin contact

Material no.

Specification

Order Number

Flush skin with plenty of water. Remove contaminated clothing. Obtain medical attention if irritation develops or persists.

Eye contact

In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops.

Ingestion

If swallowed give two glasses of water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

In case of fire, use water (flood with water), dry chemical, CO2 or "alcohol" foam.

Specific hazards during fire fighting

Contains material that can burn in fire if contained water is evaporated by heat or fire.

Further information

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear personal protective equipment; see section 8.

Environmental precautions

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

Methods for cleaning up

Ventilate area. Absorb spill with inert material and place in a chemical waste container.

7. HANDLING AND STORAGE

Handling

Safe handling advice

Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash thoroughly after handling.

Storage

Requirements for storage areas and containers

Keep in a dry, cool place.

Keep container closed when not in use.

830-1824 CAL-TINT®II RAW SIENNA

degussa.

Material no. Version
Specification 139623 Revision date
Print Date
Order Number Page

Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls

• Talc, Magnesium silicate hydrate

CAS-No. 14807-96-6

Control parameters 2 mg/m3 Time Weighted Average (TWA):(ACGIH)

Respirable fraction.

The value is for particulate matter containing no asbestos and <1% crystalline silica.

1.10 / US

9/2/2005

4 / 10

08/31/2005

5 mg/m3 PEL:(OSHA Z1)

Respirable fraction.

15 mg/m3 PEL:(OSHA Z1)

Total dust.

2 mg/m3 Time Weighted Average (TWA)

Permissible Exposure Limit (PEL):(US CA

OEL)

Respirable dust.

20millions of particles Time Weighted Average (TWA):(Z3)

per cubic foot of air 2.4millions of particles

Time Weighted Average (TWA):(Z3)

per cubic foot of air

Respirable.

The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

0.1 mg/m3 Time Weighted Average (TWA):(Z3)

Respirable.

The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

0.3 mg/m3 Time Weighted Average (TWA):(Z3)

Total dust.

The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.

Iron oxide

CAS-No. 1332-37-2

(Z3)

Respirable fraction.

Listed.

5 mg/m3 PEL:(OSHA Z1)

Respirable fraction.

15 mg/m3 PEL:(OSHA Z1)

830-1824 CAL-TINT®II RAW SIENNA

 Material no.
 Version
 1.10 / US

 Specification
 139623
 Revision date Print Date
 9/2/2005

 Order Number
 Page
 5 / 10



Total dust.

3 mg/m3 Time Weighted Average (TWA):(ACGIH)

Respirable particles.

10 mg/m3 Time Weighted Average (TWA):(ACGIH)

Inhalable particles.

Other information

The AIHA WEEL for diethylene glycol is 50 PPM for total vapor and aerosol and 10 mg/m3 for aerosol alone (eight hour time-weighted averages).

The OSHA TWA and ACGIH TWA exposure values for talc are for asbestos free talc expressed as millions of particles per cubic foot (mppcf).

The exposure limit for iron oxide is for dust and fume as Fe.

Engineering measures

Use only in well-ventilated areas.

Personal protective equipment

Respiratory protection

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hand protection

Use impermeable gloves.

Eye protection

Chemical resistant goggles must be worn.

Skin and body protection

A safety shower and eye wash fountain should be readily available.

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form paste

Color light yellow - light brown

Odor Glycol odor.

Safety data

pH 8.0 - 9.4

Boiling point/range > 100 °C

Relative density 1.8

830-1824 CAL-TINT®II RAW SIENNA

1.10 / US 08/31/2005

Material no. Version
Specification 139623 Revision date
Print Date
Order Number Page

Solubility/qualitative Solubility in water: Dispersible.

Viscosity, dynamic 78 - 111 KU (25 °C)

Relative vapor density Heavier than air

Solvents and Volatiles Data

% VOC (gm/l) 502.59

9/2/2005

6/10

Evaporation rate Slower than butyl acetate

10. STABILITY AND REACTIVITY

Conditions to avoid Not applicable.

Materials to avoid strong acids, oxidizing substances

11. TOXICOLOGICAL INFORMATION

Component Acute oral toxicity NJTSR No.56705700001-5043P

Trade Secret

LD50 Rat: 3000 mg/kg

Diethylene glycol

111-46-6

LD50 Rat: 20760 mg/kg

C.I. Pigment Yellow 42 (Iron oxide)

51274-00-1

LD50 Rat: > 5000 mg/kg

Distillates (petroleum), hydrotreated light; Kerosine - unspecified

64742-47-8

LD50 Rat: > 8000 mg/kg

NJTSR No.56705700001-5765P

Trade Secret

LD50 Rat: > 5000 mg/kg

NJTSR No.56705700001-5030P

Trade Secret

LD50 Rat: 2750 mg/kg

Component Acute inhalation

toxicity

Distillates (petroleum), hydrotreated light; Kerosine - unspecified

64742-47-8

LC50 Rat: > 14100 mg/m3 / 4 h

Component Acute dermal toxicity NJTSR No.56705700001-5043P

830-1824 CAL-TINT®II RAW SIENNA

Material no. Specification

Order Number

139623

Version Revision date Print Date Page

1.10 / US 08/31/2005 9/2/2005 7 / 10

Trade Secret

LD50 Rabbit: 2800 mg/kg

Diethylene glycol

111-46-6

LD50 Rabbit: 13300 mg/kg

Distillates (petroleum), hydrotreated light; Kerosine - unspecified

64742-47-8

LD50 Rabbit: > 4000 mg/kg

Component Repeated dose toxicity

C.I. Pigment Yellow 42 (Iron oxide)

51274-00-1

Prolonged inhalation of iron oxide dust is known to produce a condition known as siderosis. On X-rays it appears to be a benign pneumoconiosis and is not associated with pulmonary fibrosis or disability unless there is concurrent exposure to other fibrosis producing materials such as silica.

Talc, Magnesium silicate hydrate

14807-96-6

Inhalation Rat(male) Testing period: 791 d LOAEL: 0.006 mg/l

target organ/effect: Lungs

Component carcinogenicity assessment

Talc, Magnesium silicate hydrate

14807-96-6

Short term exposures to talc may cause lung irritation. Long term excessive exposure to talc dust may cause talcosis, a pulmonary fibrosis which in turn may lead to severe and permanent damage to the lungs. NTP Toxicology and Carcinogenesis Studies of Talc revealed that there is some evidence of carcinogenic activity in male rats and clear evidence of carcinogenic activity in female rats. There was no evidence of carcinogenic

activity in male or female mice.

Component teratogenicity assessment

NJTSR No.56705700001-5043P

Trade Secret

An ingredient in this product has been shown to cause developmental toxicity in laboratory animals in the presence of maternal toxicity.

Product General Toxicity Information

According to long-term animal inhalation studies, very high concentrations of diethylene glycol vapors caused central nervous system effects in mice and rats. However, an extensive review of the literature shows that no such effects have been documented in humans (Patty's Industrial Hygiene and Toxicology, 1982, Third Revised Ed., Vol 2c, p 3838).

In a continuous breeding study of mice, continued ingestion of large amounts of diethylene glycol (6 g/kg/day) caused an adverse effect on fertility and some embryotoxic and fetotoxic effects concurrent with some maternal toxicity. The relevance of these very high doses to humans is

uncertain.

830-1824 CAL-TINT®II RAW SIENNA

 Material no.
 Version
 1.10 / US

 Specification
 139623
 Revision date Print Date
 9/2/2005

 Order Number
 Page
 8 / 10



12. ECOLOGICAL INFORMATION

General Ecological Information No ecotoxicological studies are available.

13. DISPOSAL CONSIDERATIONS

WASTE

Advice on disposal

Waste must be disposed of in accordance with federal, state, provincial and local regulations. CONTAINER DISPOSAL: Empty containers by removing the top and inverting to allow all free flowing product to drain. To meet regulatory criteria, the container is considered empty when less than 3% remains in the container. Additional special handling is not typically required and the empty container can be discarded with other non-hazardous trash. Note: Local disposal regulations may be more stringent and require additional restrictions or precautions. Customers should check with their local disposal company, municipal orstate authority. Recycle of plastic or metal containers may require clean rather than empty containers. In this case the containers can be rinsed with water until the containers are considered generally product free.

14. TRANSPORT INFORMATION

Transport/further information

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Information on ingredients / Non-hazardous components

This product contains the following non-hazardous components

Water

CAS-No. 7732-18-5 Percent (Wt./ Wt.) 10 - 30 %

US Federal Regulations

OSHA

If listed below, chemical specific standards apply to the product or components:

None listed

Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants:

None listed

830-1824 CAL-TINT®II RAW SIENNA

degussa.

Material no. Specification Order Number

139623

1.10 / US 08/31/2005 9/2/2005 9 / 10

CERCLA Reportable Quantities

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

None listed

SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

Version

Page

Print Date

Revision date

- Acute Health Hazard
- · Chronic Health Hazard

SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

None listed

Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

None listed

State Regulations

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

None listed

830-1824 CAL-TINT®II RAW SIENNA

 Material no.
 Version
 1.10 / US

 Specification
 139623
 Revision date Print Date
 08/31/2005

 Order Number
 Page
 10 / 10



International Chemical Inventory Status

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact Degussa Corporation Product Regulatory Department:

Europe (EINECS/ELINCS)
 USA (TSCA)
 Canada (DSL)
 Australia (AICS)
 Listed/registered
 Listed/registered
 Listed/registered

Japan (MITI)
 Korea (TCCL)
 Philippines (PICCS)
 China
 Not listed/Not registered
 Not listed/Not registered
 Not listed/Not registered
 Not listed/Not registered

16. OTHER INFORMATION

HMIS Ratings

Health: 2*
Flammability: 1
Physical Hazard: 0

Further information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.